

REMARKS

By this amendment, claims 1, 6, and 7 have been amended. Accordingly, claims 1-11 are currently pending in the application, of which claim 1 is an independent claim.

Applicant respectfully submits that the above amendments do not add new matter to the application and are fully supported by the specification.

Entry of the Amendments and Remarks is respectfully requested because entry of Amendment places the present application in condition for allowance, or in the alternative, better form for appeal. No new matters are believed to be added by these Amendments. In view of the above amendments and the following Remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Telephone Interview Summary

Applicant thanks the Examiner for the courtesies extended during the interview of January 26, 2005. During the interview, Applicant's representative responded to the Examiner's §103 rejections of claim 1 based on U.S. Patent No. 6,380,992 to Lee (Lee).

The Examiner's first point was that Lee teaches first repair lines and the third repair lines that are connected to each other. The Examiner also stated that it would have been obvious to include a second set of pad repair lines on the substrate in Figure 7 of Lee based on the symmetric configuration of repair lines in Figure 1 of Lee.

Rejections Under 35 U.S.C. § 112, second paragraph

Claims 7-8 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite. Applicant respectfully traverses this rejection for at least the following reasons.

Claim 7 has been amended to clarify that it refers to one of the first repair lines, as originally recited in claim 1. This amendment is made for the sole purpose of clarifying claim 7 and depending claim 8. This amendment is not made for the purpose of avoiding prior art or narrowing the claimed invention, and no change in claim scope is intended. Therefore, Applicant does not intend to relinquish any subject matter by these amendments. Applicant respectfully submits that claim 7, as amended, fully complies with the requirements of 35 U.S.C. § 112, second paragraph.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 112, second paragraph rejection of claims 7 and 8.

Rejections Under 35 U.S.C. § 103

Claims 1-11 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U. S. Patent No. 6,380,992 issued to Lee ("Lee"). Applicant respectfully traverses this rejection for at least the following reasons.

Claim 1 recites:

A thin film transistor (TFT) array substrate for a liquid crystal display, comprising:
an insulating substrate including a display area and a peripheral area surrounding the display area, the peripheral area including a first peripheral region arranged along a first edge of the display area and a second peripheral region arranged along a second edge of the display area;
a plurality of signal lines formed on the insulating substrate and divided into a plurality of blocks, each block including a predetermined number of signal lines;
a plurality of first repair lines formed in the first peripheral region, each crossing the signal lines of one or more of the plurality of blocks;
a second repair line formed in the first peripheral region and crossing all of the plurality of signal lines;

a plurality of third repair lines formed in the second peripheral region and connected to the first repair lines corresponding thereto, wherein each third repair line crosses the signal lines crossed by the corresponding first upper repair line; and
a fourth repair line formed in the second peripheral region and crossing all of the plurality of signal lines.

Applicant respectfully submits that claim 1 is patentable over Lee because Lee fails to teach all of the limitations of claim 1. For example, unlike claim 1, Lee does not teach that the first repair lines and the third repair lines are connected to each other. In fact, none of the repair lines 220a, 220b, 210a, or 210b are connected to each other as shown in Figure 7. For this reason, Applicant respectfully submits that claim 1 is patentable over Lee.

Further, Lee fails to teach a second repair line or fourth repair line that crosses all of the plurality of signal lines, as recited in claim 1 of the present invention. Applicant respectfully submits that as shown in Figure 7 and stated in Col. 4, lines 56-58 of Lee each data pad repair line 220a and 220b crosses only a selected group of data pads 121 and not all of the data lines, 120. Similarly, gate pad repair lines 210a and 210b cross only gate pads 111. In contrast, Figure 1 of the present invention shows how second repair line 43 and fourth repair line 45 cross all of the data lines 12 across the substrate.

In addition, the repair lines in the present invention are disposed on two peripheral regions of the insulating substrate, as opposed to being on only one peripheral region in Lee. In fact, placing two sets of pad repair lines on the substrate in Lee would severely impede on the display area of Lee making the use of a second set of pad repair lines highly undesirable. The present invention is unique in having two sets of repair lines in two peripheral portions, and is thus, patentable over Lee.

Accordingly, Applicant respectfully requests withdrawal of the '35 U.S.C. § 103(a) rejection of claims 1-11. Since the none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicant respectfully submits that independent claim 1, and all the claims that depend therefrom are allowable.

Other Matters

Claims 1 and 6 have been amended solely for the purpose of clarification. This amendment is not made for the purpose of avoiding prior art or narrowing the claimed invention, and no change in claim scope is intended. Therefore, Applicant does not intend to relinquish any subject matter by this amendment.


CONCLUSION

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,


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